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In-kind Benefits and the Nonmetro Poor

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**United States
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ABSTRACT

Income used to measure poverty excludes in-kind benefits, such as food stamps. After valuing in-kind benefits as income, poverty is reduced, but not completely eliminated. This study reviews the current method of measuring poverty and compares it with alternative methods. Differences in poverty rates in metro and nonmetro areas are examined. Nonmetro areas continue to have a higher poverty rate after including in-kind benefits. Changes in the composition of the poor after including in-kind benefits are identified for some subgroups.

Keywords: Nonmetropolitan poor, in-kind benefits, rural income.

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SUMMARY

The current method of measuring poverty has been criticized for not including in-kind benefits as income when determining poverty status. Income is under-reported and estimates of poverty overstated when these benefits are excluded. This report focuses on differences between poverty rates in metro and nonmetro areas when in-kind benefits are counted as income.

Including in-kind benefits as income reduces the number of poor, but poverty is not eliminated. The rate of poverty remains higher for nonmetro areas. In 1982 nonmetro areas had a 12.3 percent poverty rate versus 8.9 percent for metro areas, after valuing all in-kind benefits by the market value technique, which reduces the estimate of poverty the most.

The composition of the poor population changes for some subgroups after valuing all in-kind benefits. The percentage of total poor residing in the South increased slightly. Nearly the same proportion of blacks and persons in families headed by women remain below the poverty level even after valuing all in-kind benefits. The elderly experience the biggest reduction in poverty status. Over 75 percent of the elderly poor escaped poverty after valuing all in-kind benefits by the market value technique.

In-kind Benefits and the Nonmetro Poor

Virginia K. Getz

INTRODUCTION

The current method of measuring poverty has been criticized for including only money income (4, 9, 16, 8). 1/ Program benefits received as goods and services, rather than money, are not considered as income when determining a family's poverty status. Examples of Federal programs paying nonmonetary (in-kind) benefits to the poor include Food Stamps, public housing, and Medicaid. Ignoring these benefits underreports income, which in turn overstates the estimate of poverty. Some analysts believe that if income measurements included in-kind benefits, poverty would be greatly reduced, if not eliminated (1, 2). For example, Browning (2, pp. 29-30) concluded:

... the net transfer (exclusive of education) to the lowest quartile is more than large enough to eliminate poverty as officially defined, if in-kind benefits are counted as income or if in-kind transfers are converted to cash transfers.

... some widely used government statistics concerning the low-income population have become increasingly unreliable over the past few years. Because the Census Bureau's statistics on income distribution and the official poverty counts ignore in-kind transfers, they are now largely useless as a basis for rational analysis of questions concerning income distribution.

The U.S. Congress and the Office of Management and Budget (OMB) recognize this problem. They stress continued investigation of how in-kind transfers affect estimates of the number of poor (9, 15). More complete information on in-kind benefits would help Congress and the Executive Branch determine how well the transfer system serves the poor.

Understanding the effects of in-kind benefits is crucial because in-kind benefit outlays increased substantially during the seventies. In-kind income security benefits grew 509 percent from 1970 to 1980, compared to 312 percent for monetary benefits (table 1). In 1970, in-kind benefits represented less than 20 percent of total U.S. Federal outlays for income security; by 1980 this proportion had grown to 26.1 percent. In 1980, nearly two-thirds of Federal

1/ Underscored numbers in parentheses refer to references at the end of this report.

Table 1--Federal outlays for income security benefits 1/

		Cash		In-kind	
Year	Total	Amount	Percent of total income security benefits	Amount	Percent of total income security benefits
		---Million dollars---		Million dollars	
		Percent		Percent	
1970	60,209	48,567	80.7	11,641	19.3
1971	74,573	60,112	80.6	14,461	19.4
1972	84,951	67,319	79.2	17,632	20.8
1973	95,949	76,703	79.9	19,246	20.1
1974	111,167	88,255	79.4	22,912	20.6
1975	139,638	109,585	78.5	30,053	21.5
1976	164,639	128,763	78.2	35,875	21.8
1977	179,656	138,299	77.0	41,357	23.0
1978	195,376	147,909	75.7	47,467	24.3
1979	215,453	161,732	75.1	53,721	24.9
1980	271,216	200,307	73.9	70,909	26.1

1/ Cash income security benefits include Social Security, Federal Employee Retirement, veterans benefits, public assistance, and Unemployment Insurance. In-kind benefits include goods and services such as Food Stamps, Medicare, Medicaid, and public housing.

Source: (10).

income security outlays directed toward the poor were in-kind, compared to less than half in 1970. 2/ This report focuses on how including in-kind benefits as income would reduce the number of nonmetro poor. 3/ A brief history of the method of measuring poverty is given, methods used to value in-kind benefits are explored, and metro/nonmetro differences in poverty reduction from in-kind programs are examined.

2/ Major programs directed toward the poor include: Aid to Families with Dependent Children, Supplemental Security Income, Food Stamps, public housing, and Medicaid. Outlays for these programs totaled \$7,031 million in 1970 and \$38,154 million in 1980 (10). The in-kind programs (Food Stamps, public housing, and Medicaid) totaled \$3.163 million in 1970 and \$24,434 million in 1980. 3/ Nonmetro is defined as a place outside a Standard Metropolitan Statistical Area (SMSA), as defined in the 1970 Census. An SMSA is a county or group of contiguous counties containing at least one city with 50,000 or more people. Additional contiguous counties are included in an SMSA if they are economically and socially integrated with the central city (11).

HISTORY OF POVERTY MEASUREMENT

President Johnson announced the War on Poverty in his 1964 State of the Union Message (16). At that time, the Council of Economic Advisors established a poverty threshold of \$3,000 annual income for a family and \$1,500 for an individual to estimate the number of families that might be classified as poor under the new antipoverty programs. The Council adapted these income thresholds from a 1963 Social Security Administration study by Mollie Orshansky (6). She estimated that a nonfarm family consisting of 2 adults and 2 children needed a minimum income of \$3,165. She developed income criteria only for families with children. These criteria were based on the amount of money needed to provide an adequate diet.

Orshansky's minimum income levels were less for farm families than for nonfarm families (6). This difference was based on the assumption that farm families needed less cash income for items such as food and housing. Farm families generally could obtain these items through their occupation, rather than by direct purchase (6, 7). The farm differential was the sole attempt to include in-kind income. Thus, from the beginning, the method of measuring poverty was based largely on money income.

In 1965, Orshansky revised her work and provided poverty thresholds for a wider variety of family types (7). The farm differential was retained. The Social Security Administration (SSA) originally updated Orshansky's thresholds annually, incorporating changes in food prices in the USDA's economy food plan (16).

In August 1969, OMB designated the SSA's thresholds and the associated estimates of the poverty population as official statistics to be released annually by the Census Bureau. Two modifications recommended by a Federal interagency committee were incorporated into the thresholds (16). One was to use the Consumer Price Index (CPI) rather than food prices to adjust threshold levels for inflation. The CPI was selected because it includes the cost of food and other items. The other modification was to increase the poverty threshold for farm residents to 85 percent, instead of 70 percent, of the nonfarm threshold.

The most recent changes to the Census Bureau data include implementing the householder concept, rather than the earlier head concept, and eliminating differentials based on farm residence and sex of householder (11, 12). The new householder concept was incorporated in the March 1980 Current Population Survey (CPS). The farm residence and sex of householder differentials were eliminated in the March 1982 CPS.

The first adult listed on the CPS questionnaire is designated as householder using the new householder concept. The first person listed should be the one who owns or rents the dwelling according to the questionnaire's instructions. If a housing unit is jointly owned by a married couple, either the husband or wife may be listed first. Under the old head concept, the husband was always assumed to be the family head (11).

The farm differential has become less meaningful in recent years because many farm families now receive income from off-farm work and shop in markets like nonfarm families (12). The differential also tends to bias farm family incomes upward. Why should nonmoney income be included as a part of total income for farm families and not for nonfarm families? Nonfarm and farm families can garden, and many nonfarm families own their own homes and receive an in-kind income from the equity (3).

Eliminating the distinction based on sex of householder resulted from increased sensitivity to the need for equitable treatment of men and women (12). The distinction arose because the poverty thresholds are ultimately based on food costs, and women do not need as much food as men. Nutritional requirements differ with sex, but without appropriate standards of need for items other than food, it is difficult to determine whether differences also exist for overall income needs. Other differentials for family composition were retained. The current definition of poverty still provides a range of income cutoffs based on family size, number of children under 18 years old, and age of householder (12).

Potential adjustments to the definition of poverty are discussed continually. Including in-kind income in determining poverty status is one possible adjustment. Another suggested adjustment is incorporating newer data on nutritional requirements and consumption patterns into the threshold formula (12).

VALUING METHODS FOR IN-KIND INCOME

The most thorough assessment of the effects of in-kind transfers appeared in a recent Census Bureau report (15). This report updates an earlier study by Timothy M. Smeeding (9). Results for nonmetro areas are discussed below. First, however, we examine conceptual problems in counting in-kind benefits as income, the programs to be considered, and the methods used to value in-kind benefits.

The current poverty thresholds are based on relationships among nutritional requirements, money spent on food, and money income (9). Orshansky and others argue that if money and in-kind income are used to determine poverty status, the poverty thresholds should be changed to reflect both in-kind and money incomes (9). Unfortunately, adjusting the poverty threshold to reflect in-kind income is a major undertaking. Current poverty thresholds determine poverty status after valuing in-kind benefits.

The programs considered are summarized in table 2. Means-tested transfers are distributed to persons only if their income and assets fall below specified program guidelines. Nonmeans-tested transfers have no income or resource tests for eligibility requirements. The estimated market value for means-tested in-kind programs in 1982 totaled \$46.9 million, while the nonmeans-tested programs were valued at \$51.6 million (15).

The total value of these in-kind benefits is nearly four times larger than cash assistance benefits (15).

Table 2--Selected in-kind programs to measure benefits' effect on poor population

Type of program	Name of program	
	Means tested	Nonmeans tested
Food	Food stamps	Regular-price school lunch
	Free or reduced-price school lunch	
Housing	Public or other subsidized housing	
Medical care	Medicaid	Medicare

Source: (9, 15).

The value of in-kind benefits is based on three techniques: (1) market value, (2) recipient or cash equivalent value (RV-CE), and (3) poverty budget share value.

The market value is equal to the purchase price of the good or service. For example the market value of food stamps is the dollar value of food coupons. The market value of medical care is the price paid for services (9, 15).

The RV-CE value reflects the participant's valuation of the benefits and is usually less than the market value. The RV-CE is the cash amount a recipient would be willing to accept in exchange for the in-kind transfer. This amount of cash would leave the recipient with the same sense of well-being as would the in-kind transfer. The RV-CE estimates are based on survey data of normal expenditures for goods and services at different income levels (9, 15).

The poverty budget share value directly links in-kind benefits to the current concept of poverty. This technique assumes that the value of in-kind benefits cannot be more than the money spent on a given good by an individual at or near the poverty threshold prior to receiving the in-kind benefit. In other words, the value is the amount of money released for additional consumption. The poverty budget share assigns the lowest values to in-kind benefits of all three techniques (9, 15).

The following shows how valuing in-kind benefits reduces poverty in metro and nonmetro areas. Census data are rearranged to make clearer comparisons between metro and nonmetro areas. Program participation data from another Census report (14) are examined to help explain differences in poverty reduction between metro and nonmetro areas.

RESULTS

Measuring poverty by the official method gives a poverty rate of 15.0 percent for the United States, 13.7 percent for metro areas, and 17.8 percent for nonmetro areas (table 3). By adding in-kind income from food and housing programs, the number of poor is reduced by 8 to 12 percent, depending on the valuation method used. Further reductions in poverty occur when medical care is valued as income. 4/

The Poverty rate remains slightly higher in nonmetro areas, regardless of the program included or the valuation method used. Including in-kind benefits reduces the number of poor in nonmetro areas by about the same proportion as in metro areas. Thus, the nonmetro poor constitute the same share of the total poor after including in-kind benefits. The largest difference occurs when using the market value method; nonmetro share of poverty increases from 38.2 percent, using official current method of measuring poverty, to 39.7 after including all in-kind benefits. 5/

Some people may expect the inclusion of Federal in-kind benefits to reduce poverty more in nonmetro areas. The higher nonmetro poverty rates can be partially explained by differences in in-kind program participation rates (table 4). The metro poor are more likely to participate in in-kind programs, particularly the means-tested public or subsidized housing, and medicaid programs. 6/ Lower participation in these programs by nonmetro residents may reflect an unintentional urban bias. As an example, consider the medicaid program. Recipients of Aid to Families with Dependent Children (AFDC) or Supplemental Security Income (SSI) are automatically eligible for Medicaid in all states (17). Some States also extend Medicaid to the medically needy. 7/ However, only 55 percent of nonmetro poor live in these more generous States, compared with 64 percent of the metro poor. 8/

Other programs, largely nonmeans-tested, treat the nonmetro poor more generously. Metro and nonmetro participation rates differed by a percentage point or less for free or reduced-price school lunch, regular school lunch,

4/ The reduction in the number of poor from adding medical care is not statistically significant using the RV-CE or poverty budget share technique for nonmetro areas.

5/ The difference between the two percentages is not statistically significant.

6/ The difference in Food Stamp participation rates was not statistically significant.

7/ Medically needy individuals are eligible for medical assistance, but not for financial assistance. These individuals meet all criteria for categorically needy assistance, except income, and have relatively large medical bills (17).

8/ Estimates of the percent of poor in each State are based on unpublished 1980 Census figures.

Table 3--Number of poor and poverty rates using alternative income concepts and valuing techniques, 1982

Income concept	Market value			Recipient cash equivalent			Poverty budget share		
	U.S.	Metro	Nonmetro	U.S.	Metro	Nonmetro	U.S.	Metro	Nonmetro
Number of persons (thousand)	229,412	155,634	73,778	229,412	155,634	73,778	229,412	155,634	73,778
Money income only:									
Number of poor (thousand):	34,398	21,247	13,152	34,398	21,247	13,152	34,398	21,247	13,152
Poverty rate (percent)	15.0	13.7	17.8	15.0	13.7	17.8	15.0	13.7	17.8
Money income plus food and housing programs:									
Number of poor (thousand):	30,688	18,763	11,925	31,365	19,275	12,091	31,111	19,117	11,994
Poverty rate (percent)	13.4	12.1	16.2	13.7	12.4	16.4	13.6	12.3	16.3
Reduction (percent)	-10.8	-11.7	-9.3	-8.8	-9.3	-8.1	-9.6	-10.0	-8.8
Money income plus food, housing, and medical care programs									
Number of poor (thousand)	22,885	13,809	9,076	29,058	17,863	11,195	28,713	17,547	11,166
Poverty rate (percent)	10.0	8.9	12.3	12.7	11.5	15.2	12.5	11.3	15.1
Reduction (percent)	-33.5	-35.0	-31.0	-15.5	-15.9	-14.9	-16.5	-17.4	-15.1

Source: Derived from (15).

Table 4--Participation of the poor population in selected in-kind transfer programs by residence, 1982

Program	Type of residence					
	U.S.		Metro		Nonmetro	
	Poor	Share	Poor	Share	Poor	Share
	participants	of total poor ^{1/}	participants	of total poor ^{1/}	participants	of total poor ^{1/}
	1,000	Percent	1,000	Percent	1,000	Percent
Means tested:						
Food Stamps	15,650	46.9	9,701	47.3	5,949	46.2
Free or reduced-price school lunch	6,430	19.3	3,984	19.4	2,445	19.0
Public or subsidized housing	4,519	13.5	3,587	17.5	932	7.2
Medicaid	12,629	37.9	8,733	42.6	3,896	30.3
Non-means tested:						
Medicare	4,187	12.6	2,318	11.3	1,869	14.5
Regular school lunch	968	2.9	509	2.5	459	3.6
Group health insurance	5,359	16.1	3,212	15.7	2,147	16.7
Pension plan	933	2.8	586	2.9	347	2.7

Note: The number of poor participants includes poor people of all ages, except for the Medicare and school lunch programs. The number of Medicare participants includes persons 15 years old and over, and the number of school lunch participants only includes children 5-18 years old.

^{1/} The estimated number of poor is slightly different than in table 3. Poverty status in this table was computed on a household basis, rather than on the basis of families or unrelated individuals.

Source: Derived from (14).

group health insurance, and pension plans. Medicare was the only program with a substantially higher participation rate in nonmetro areas. This reflects the higher proportion of elderly nonmetro poor. Nearly 13 percent of the nonmetro poor population was 65 or older in 1982, compared with only 10 percent of the metro poor (13).

Published data for various metro and nonmetro groups are not provided. Thus, a complete examination of the effects of in-kind benefits on the aged, blacks, southerners, or female householders is not possible. We can infer, however, how valuing in-kind benefits affects various nonmetro groups from existing nonmetro and national data.

The composition of the poor differs in metro and nonmetro areas using current methods of measuring poverty. The metro poor are more likely to be black or live in families with a female head. The nonmetro poor tend to live in the South and are more likely to be elderly (5). Including in-kind benefits affects these groups differently and changes the composition of the poor in both areas.

The proportion of poor among blacks, families with a female head, and especially the elderly falls at the national level, using the market value technique. The percentage of poor persons in the South stays about the same, (table 5). 9/ The proportion of elderly poor decreases using the other valuation techniques (not shown). The proportion of poor in other groups remains about the same.

The composition of nonmetro poor changes with the method of valuation. For example, a higher percentage of nonmetro poor would be white and not in a female headed family using the market value technique. But, the elderly would makeup a smaller portion of the nonmetro poor. Only the proportion of elderly would be greatly affected by using the other techniques.

9/ The slight increase in the proportion of poor in the South, shown in table 5 is not statistically significant.

Table 5--Composition of poor after including all in-kind benefits, using market value measuring technique, 1982

Group	Money income only		Market value	
	Share of		Share of	
	Poor	total poor	Poor	total poor
	Number	Percent	Number	Percent
South	13,967	40.6	9,588	41.9
Non-South	20,431	59.4	13,296	58.1
Elderly	3,751	10.9	912	4.0
Nonelderly	30,647	89.1	21,973	96.0
Black	9,697	28.2	5,839	25.5
Nonblack	24,701	71.8	17,046	74.5
Inhouseholds with a female householder, no husband present	11,701	34.0	7,137	31.2
All other persons	22,697	66.0	15,748	68.8
All poor persons	34,398	100.0	22,885	100.0

Source: Derived from (15).

IMPLICATIONS

Some analysts, such as Anderson and Browning (1, 2), feel that poverty would be eliminated if in-kind benefits were included in determining poverty status. They believe increased spending on transfer payments has been enough to effectively eliminate poverty.

The data in table 3 show that valuing in-kind transfers reduces the number of poor. These benefits, however, do not entirely eliminate poverty. In addition, nonmetro areas continue to experience a higher incidence of poverty. Nearly 12.3 percent of the nonmetro population is poor, versus 8.9 percent for metro areas, after valuing all benefits using the market value technique. This technique reduces the estimate of poverty the most.

The composition of the nonmetro poor is similar to the current poverty composition for all population subgroups, except the elderly. After including all in-kind benefits the nonmetro poor continue to be mostly white and individuals not living in families maintained by women. Over three-fourths of the elderly poor escaped poverty after valuing all in-kind benefits using the market value technique. Thus, the proportion of elderly poor would decrease in nonmetro areas.

REFERENCES

1. Anderson, Martin. Welfare: The Political Economy of Welfare Reform in the U.S. Hoover Institution Press, Stanford, Calif. 1978. 251 pp.
2. Browning, Edgar K. Redistribution and the Welfare System. American Enterprise Institute for Public Policy Research, Washington, D.C. 1975.
3. Carlin, Thomas A., Robert A. Hoppe, Linda M. Ghelfi, and Janet W. Coffin. Aspects of Welfare and Poverty in Rural America: Two Issue Briefs. U.S. Dept. Agr., Econ. Stat. Coop. Serv., Staff Report, Washington, D.C. Nov. 1979, pp.11-18.
4. Fendler, Carol, and Mollie Orshansky. "Improving the Poverty Definition." Paper presented at 1979 Ann. Mtg. Am. Stat. Assoc., Washington, D.C. Oct. 1979.
5. Getz, V. K. and R.A. Hoppe. "The Changing Characteristics of the Nonmetro Poor," Social Development Issues. School of Social Work, Univ. Iowa; Iowa City, Iowa. 7 (1): 29-44. Spring 1983.
6. Orshansky, Mollie. "Children of the Poor," Social Security Bulletin, Washington, D.C. July 1963, pp. 3-13.
7. . "Counting the Poor: Another Look at the Poverty Profile," Social Security Bulletin, Washington, D.C. Jan. 1965 pp. 3-29.
8. Peskin, Janice. "In-Kind Income and the Measurement of Poverty," The Measure of Poverty. U.S. Dept. Health Human Serv., Tech. Paper VII, Washington, D.C. Oct. 1976.
9. Smeeding, Timothy M. Alternative Methods for Valuing Selected In-kind Transfer Benefits and Measuring Their Effect on Poverty. U.S. Dept. Commerce, Bureau Census, Tech. Paper, No. 50, Washington, D.C., March 1982.
10. U.S. Dept. Commerce, Bureau Census. Statistical Abstract of the United States, Washington, D.C. selected years 1970-80.
11. . Characteristics of the Population Below the Poverty Level: 1979. Series P-60, No. 130, Washington, D.C. Dec. 1981.
12. . Characteristics of the Population Below the Poverty Level: 1980. Series P-60, No. 133, Washington, D.C. July 1982.



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13. U.S. Dept. Commerce, Bureau Census. Money Income and Poverty Status of Families and Persons in the U.S.: 1982 (advance data from the March, 1983 Current Population Survey). Series P-60, No. 140, Washington, D.C., July 1983.
14. . Characteristics of Households and Persons Receiving Selected Noncash Benefits: 1982, Series P-60, No. 143, Washington, D.C. Jan. 1984.
15. . Estimates of Poverty Including the Value of Noncash Benefits: 1979 to 1982. Tech. Pap. No. 51, Washington, D.C. Feb 1984.
16. U.S. Dept. Health Human Ser. The Measure of Poverty. A Report to Congress as Mandated by the Education Amendments of 1974. Washington, D.C. April 1976.
17. . Health Care Financing Program Statistics: The Medicare and Medicaid Data Book, 1983, Washington, D.C. Dec. 1983.